

Peperomia hunteriana (Piperaceae), a new species from the 'Wet Tropics' of north-eastern Queensland

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Summary

Forster, Paul I. (1999). *Peperomia hunteriana* (Piperaceae), a new species from the 'Wet Tropics' of north-eastern Queensland. *Austrobaileya* 5(3): 573-575. *Peperomia hunteriana* is described and illustrated. Information is provided on its distribution and habitat. A conservation status of Rare is recommended. A key to the native and naturalised species of *Peperomia* in mainland Australia is appended.

Keywords: *Peperomia hunteriana*, Piperaceae, Queensland

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Introduction

An account of the five species of *Peperomia* that occur on the Australian mainland has been previously provided (Forster 1993), as well as additional notes on *P. bellendenkerensis* Domin (Bostock & Forster 1995).

John Hunter of Coffs Harbour subsequently brought to my attention an anomalous population of *Peperomia* that he had collected in December 1994 on Mt Bartle Frere in the 'Wet Tropics' of north Queensland. Re-examination of herbarium material at BRI and QRS revealed two additional collections of the same entity including a much earlier collection by Len Brass in 1932. Both of these collections had been originally identified as *P. leptostachya* Hook. & Arn., this name being now considered a synonym of *P. blanda* (Jacq.) Knuth (Forster 1993). Examination of plants in the field followed by cultivation of both this entity and the other Australian taxa under uniform conditions has revealed that yet another species is present. This species is formally described and illustrated here as a precursor to my account of the genus in 'Flora of Australia' Volume 2.

***Peperomia hunteriana* P.I.Forst. sp. nov.**, a
Peperomiae enervi C.DC. et F.Muell.,
caulibus et foliis dense pilosis

trichomatibus 0.4–0.8 mm longis (in illa glabris vel minute hispidis), pedunculis spicarum florentium in vivo tenuioribus (0.5–0.8 mm diametro adversum 1–1.5 mm), idemque sparse pilosis (in illa glabra) et bracteis floralibus fere ovario duplo longioribus (adversum longitudinem circa eandem), differt. **Type:** Queensland. COOK DISTRICT: Wooroonooran National Park, Mt Bartle Frere, 25 October 1997, P.I.Forster, R.Jensen & R.Booth PIF21777 (holo: BRI; iso: MEL, QRS).

Erect, succulent herb to 10 cm high; foliage densely hairy. Leaves usually in a whorl of 3, occasionally 4-whorled; lamina obovate to orbicular, to 15 mm long, 10 mm wide, secondary venation obscure; base cuneate to rounded; apex notched, obtuse or rounded. Spike terminal, solitary or with up to 5 branches, to 5 cm long; peduncle 5–12 mm long; fertile axes 0.5–4.5 cm long. Flowers slightly sunken into axis, spaced 1–1.5 mm apart; bracts rounded, 0.4–0.5 mm long, 0.4–0.5 mm wide. Anthers c. 0.4 mm long, 0.3 mm wide. Ovary rounded, 0.2–0.3 mm long, 0.2–0.3 mm diam. Drupes not seen. Fig. 1.

Additional specimens examined. Queensland. COOK DISTRICT: Slopes of Mt Demi, Feb 1932, Brass 2084 (BRI); Black Mtn, Daintree Natl. Park, May 1998, Forster PIF22960 et al. (BRI, QRS); Bartle Frere, Dec 1994, Hunter JH1621 (BRI); Mt Lewis forestry road, Mar 1999, Jago 5144 (BRI); Summit area of Mt Lewis, Sep 1977, Powell 783 & Armstrong (BRI).

Distribution and habitat: *P. hunteriana* is endemic to the ‘Wet Tropics’ of north-eastern Queensland and has been collected from four localities. Plants grow as lithophytes on exposed granite outcrops adjacent to, or within simple, microphyll to notophyll vineforest at altitudes between 1100–1520 m.

Notes: This species appears nearest to *P. enervis* but is immediately distinguishable by the copious indumentum on the foliage comprising trichomes 0.4–0.8 mm long (versus glabrous or minutely hispid), the thinner peduncles of the flowering spike in live material

(0.5–0.8 mm diameter versus 1–1.5 mm) that are also sparsely hairy (versus glabrous) and the floral bracts that are nearly twice the length of the ovary (versus about the same length). The leaf lamina also tends to be more obovate in *P. hunteriana* as opposed to the largely oblong ones encountered in *P. enervis*. These differences are maintained when plants are cultivated under similar conditions.

The native and naturalised species of *Peperomia* in mainland Australia may be distinguished with the following key. Species authorship may be found in Forster (1993).

- | | | |
|---|---|-----------------------------|
| 1 | Leaves alternate | 2 |
| | Leaves opposite or whorled | 3 |
| 2 | Leaves 3-nerved at base, foliage with scattered trichomes | P. bellendenkerensis |
| | Leaves 5-nerved at base, foliage glabrous | P. pellucida |
| 3 | Leaves in whorls of 4 | P. tetraphylla |
| | Leaves opposite or in a whorl of 3 | 4 |
| 4 | Leaves opposite | P. blanda |
| | Leaves usually in a whorl of 3 | 5 |
| 5 | Stems and leaves with dense trichomes | P. hunteriana |
| | Stems and leaves glabrous or minutely hispid | P. enervis |

Conservation status: *Peperomia hunteriana* is an inconspicuous species and poorly collected. It is probably not infrequent at higher altitudes in the ‘Wet Tropics’; however, further survey work is necessary to confirm this.

Etymology: Named for John Hunter of Coffs Harbour, N.S.W. who discovered this species during a vegetation survey of Mt Bartle Frere and vicinity for the Queensland Herbarium and brought it to my attention.

Acknowledgements

J. Hunter provided material of *P. hunteriana* and information on plants in habitat. P.D. Bostock provided the Latin translation of the diagnosis.

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References

- BOSTOCK, P.D. & FORSTER, P.I. (1995). Distribution, habitat and conservation status of *Peperomia bellendenkerensis* (Piperaceae), a rare endemic from the ‘Wet Tropics’ of north-eastern Queensland. *Austrobaileya* 4: 449–450.
- FORSTER, P.I. (1993). A taxonomic revision of the genus *Peperomia* Ruiz. & Pav. (Piperaceae) in mainland Australia. *Austrobaileya* 4: 93–104.

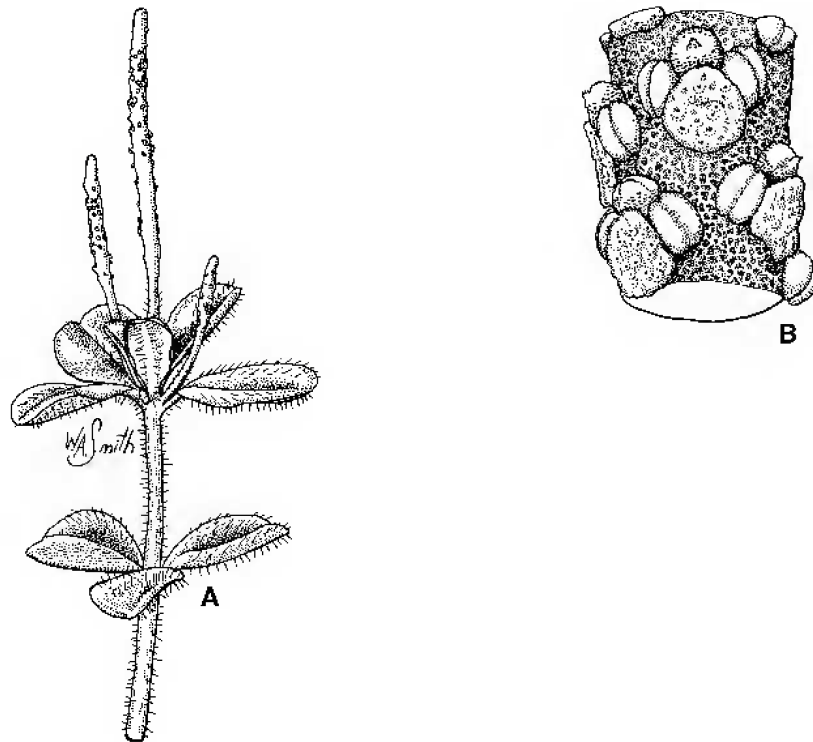


Fig. 1. *Peperomia hunteriana*. A. habit of flowering stem x 3.5. B. close up of inflorescence with several flowers x 24. From live material of the clonotype. Del. W. Smith.